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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,597	04/17/2000	Toyoshige Nohnishi	000344	1365

38834 7590 06/30/2004

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EXAMINER

LAMB, TWYLER MARIE

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/551,597

Applicant(s)

NOHNISHI, TOYOSHIGE

Examiner

Twyler M. Lamb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 4, 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (Ito) (US 5,724,154) in view of Sugaya (US 6,304,336).

With regard to claims 1 and 7, Ito discloses a page printer (Figure 1) comprising: a printer engine (printer unit 2); a memory (image memory unit 9) which includes an input area, for storing input data (col 3, lines 11-13), a compression area (memories A 506 to D 509), for storing compressed drawing data (col 12, lines 42-44), and a bit-map area (buffer 501), for storing expanded drawing data (col 14, lines 35-37); a compression circuit (compression circuit 503), for compressing drawing data (col 12, lines 25-27) and for storing the resultant compressed drawing data in said compression area of said memory (col 12, lines 42-44); a expanding circuit (expanding circuit 504), for expanding said compressed drawing data (col 14, lines 33-35) and for storing the resultant expanded drawing data in said bit-map area of said memory (col 14, lines 35-37); a video output circuit (video control circuit 1004), for transferring said expanded drawing data to said printer engine (col 6, lines 22-25); and a controller (CPU 1003) for analyzing said input data for each job (col 6, lines 35-40).

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Ito does not clearly teach creating drawing data for a designated resolution, wherein said controller changes said designated resolution to a lower one, and repeats an input data analyzation process beginning with said input data entered for the first page of said job when said controller detects a memory shortage of said compressed area, and prints said job at the lower printing resolution.

Sugaya discloses a printer that includes creating drawing data for a designated resolution, wherein said controller changes said designated resolution to a lower one, and repeats an input data analyzation process beginning with said input data entered for the first page of said job when said controller detects a memory shortage of said compressed area, and prints said job at the lower printing resolution (col 8, line 55 – col 9, line 9; col 10, lines 8-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Ito to include creating drawing data for a designated resolution, wherein said controller changes said designated resolution to a lower one, and repeats an input data analyzation process beginning with said input data entered for the first page of said job when said controller detects a memory shortage of said compressed area, and prints said job at the lower printing resolution as taught by Sugaya. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Ito by the teaching of Sugaya to keep the memory free as taught by Sugaya in col 3, lines 6-14 and col 8, line 55 – col 9, line 9.

With regard to claim 2, Ito also discloses said controller updates a memory variable indicating the remaining capacity of said compression area at each time said

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compression circuit writes said compressed drawing data in said compression area of said memory, and in accordance with said remaining capacity, determines whether said memory shortage has occurred (col 13, lines 43-58).

With regard to claim 3, Ito also discloses further comprising: selection means which, to restart printing, selects either the first page of said job or a page whereat said memory shortage occurred, wherein, when a page whereat said memory shortage occurred is selected, said controller begins the analyzation of input data for said page whereat said memory shortage occurred (col 10, lines 15- 66).

With regard to claim 6, Ito also discloses said controller has an analyze pointer for indicating an analyze position of said inputted data for said job and initializes said analyze pointer when detects said memory shortage (col 10, lines 15- 66).

Allowable Subject Matter

3. Claims 4 and 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 identifies the unique feature "said controller creates a resolution change message to print on said resolution change page".

Claim 5 identifies the unique feature "said controller displays a resolution change message on a display panel".

Response to Arguments

4. Applicant's arguments, see Amendment, pages 2-3, filed 4/13/04, with respect to the rejection(s) of claim(s) 1-3 and 6-7 under 35 U.S.C. 103(a) have been fully

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considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Sugaya.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler Lamb whose telephone number is 703 - 308-8823. The examiner can normally be reached on M-TH (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-308-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

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Twyler Lamb

A handwritten signature in black ink, appearing to read 'Twyler Lamb', with a stylized, cursive script.

June 26, 2004